

Purchasing Receipts



PACKING SLIP/
CERTIFICATE OF CONFORMANCE

A. M. Castle & Co.

Page 1 of 1

Shipment No:3672863

Ship From:	Sold To:	Ship To:	Deliver To:
A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN

68Z8h992

Shipment Details		Final Destination Branch - TOR			
Order No	Line No	Item No	Description	Carrier	BOL No
5214452	1	750023.MO	0.2500.PL.7075.T651.ALUMINUM.48.5000.144.5000 CUT 2SIDED TO 6 IN (+ .1250/- .0000 IN) X 144.5 IN (+ .1250/- .0000 IN) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12	MANITOULIN	3672863-2
Purchase Order No	Part Number	Ordered Qty	Invoice Qty		
40612		7.00 PCS	7.00 PCS		
Details	ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #'S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS				
Delivery No.	Mill/Source	Heat Number	Mech Id	PCS	Width (IN)
122018109	KAISER ALUMINUM		7		159.9850

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer, may not be returned for credit.
Reviewed by Authorized Castle Metals Representative: _____

Aug 13 2018 Date: Name: KALOUS



PACKING SLIP/
CERTIFICATE OF CONFORMANCE

A. M. Castle & Co.

Page 1 of 1

Shipment No:3672863

Ship From:	Sold To:	Ship To:	Deliver To:
A M CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN CA	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN CA
Date Shipped	F.O.B.	Freight Terms	BOL No
13-AUG-18	ORIGIN	Prepaid	MANTOULLIN
			3672863-2

Shipment Details

Final Destination Branch - TOR			
Order No	Line No	Item No	Description
5214452	2	752188.MO	1.0000.PL.7075.T651.ALUMINUM.USI.48.5000.144.5000 CUT 2SIDED TO 6 IN (+ .1250/- .0000 IN) X 144.5 IN (+ .1250/- .0000 IN) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12
Purchase Order No	Part Number	Ordered Qty	Invoice Qty
40612		5.00 PCS	5.00 PCS
Details	ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS		

Delivery No.	Mill/Source	Heat Number	Mech Id	PCS	Width (IN)	Length (IN)	Shipped Qty(LBS)
122018109	CONSTELLUM ROLLED PRODUCTS	9 4 1 3 6 3 1 Art		5			451.4090

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any special requirements. All claims for defective material are waived unless made within 60 days of the shipment date. If the customer cannot be returned for credit.
Reviewed by Authorized Castle Metals Representative:
L.005 T.8
Joe Kavalous
Date: Name: **AUG 13 2018**



PACKING SLIP/
CERTIFICATE OF CONFORMANCE

A. M. Castle & Co.

Page 1 of 1

Shipment No:3672863

Ship From:		Sold To:		Ship To:		Deliver To:	
A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped		F.O.B.		Freight Terms		Carrier	
13-AUG-18		ORIGIN		Prepaid		MANITOULIN	
Shipment Details				Final Destination Branch - TOR			
Order No	Line No	Item No	Description	Ordered Qty	Invoice Qty		
5214452	3	750412.MO	1.5000.PL.7075.T651.ALUMINUM.USI.48.5000.144.5000 CUT 2 SIDED TO 1.5 IN (+ .1250/- .0000 IN) X 144.5 IN (+ .1250/- .0000 IN) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12	7.00 PCS	7.00 PCS		
Purchase Order No	Part Number						
40612							
Details	ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #S Email P/s and certs to: clavole@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS						
Delivery No.	Mill/Source	Heat Number	Mech Id	PCS	Width (IN)	Length (IN)	Shipped Qty(LBS)
122018109	CONSTELLIUM ROLLED PRODUCTS	9 4 1 0 0 9 7	7				234.6141

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for DART Aerospace & Co. including any specificiations or drawings included with the order. Any part of the description, Test reports or file subject to examination. All claims for defective material are waived unless made within 60 days of the shipment date or material can not be returned for credit.
AUG 13 2018
Reviewed by Authorized Castle Metals Representative: _____ Date: _____ Name: _____

<p>STRAIGHT BILL OF LADING -SHORT FORM - ORIGINAL - NOT NEGOTIABLE</p> <p>RECEIVED, Subject to the classification and tariffs in effect on the date of issue of this Bill of Lading The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date hereof, if this is a rail or rail-water shipment, or (2) in the applicable motor carrier classification or tariff this is a motor carrier shipment.</p>					Shipper No.: 3672863-2
					FROM AT: A. M. Castle & Co. 2150 ARGENTIA ROAD MISSISSAUGA ON L5N 2K7 CAN
					Ship Date: 13-AUG-18
Consigned To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY ON K6A 1K7 CAN		Delivery instructions: ALL LOADS MUST BE TARPED. DELIVER PACKING LIST AND TEST REPORTS OR CONSIGNEE WILL REFUSE.			Payment Terms: Prepaid REMIT FREIGHT INVOICES TO: RayTrans Management, Inc. PO Box 1210 Washington PA 15301
Carrier Name: MANITOULIN		Additional Insurance Coverage: The agreed or declare value for the property is hereby specifically stated by the shipper to be not exceeding: _____ per _____			
Shipment Breakdown:					Shipment Weights:
Quantity	Packaging	Packaging Dim's L X W X H	Class	Commodity	Product 846 LBS Dunnage 50 LBS Gross 896 LBS
2	BUNDLE	145 X 12 X 12	50	Metal Product	
1	SKID		50	Metal Product	
ORDER DETAIL:					
Customer PO		Sales Order No.	Line No.	Castle Item No.	Quantity Shipped
40612		5214452	2	5214452*2*1	5 PCS
40612		5214452	3	5214452*3*1	7 PCS
40612		5214452	1	5214452*1*1	7 PCS
Subject to Section 7 of Conditions of applicable bill of Lading. If this shipment is to be delivered to the consignee without recourse to the consignor, the consignor shall sign the following statements.			If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." NOTE: Where the rate is dependent on value, the shippers are required to state specifically in writing the agreed or declared value of the property.		
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.			The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding		
THIS SHIPMENT IS TO BE TENDER RECEIVED AND TO BE CARRIED SUBJECT TO ALL TERMS AND CONDITIONS OF THE STEAMSHIP COMPANIES CURRENT FORM BILL OF LADING			Customer is responsible for all shipping documents and compliance with United States and Canadian laws, including but not limited to U.S. and Canadian Export laws and regulations.		
THIS IS TO CERTIFY THAT THE ABOVE NAMED ARTICLES ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.					
SHIPPER, PER: <i>insert creator's name</i>					Per _____ Driver's Signature _____ Name _____ Please Print Name Here _____
PROOF OF DELIVERY: <i>Signature / Date</i>					Shipper No.: 3672863-2 08/13/18 FB All pages must be signed
					Date _____ Page 1 of 1





Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040612

Supplier:	MEC002-VU Metaux Castle P.O. Box 4090 Stn A Toronto ON M5W OE9 Canada	PO No:	PO040612
		PO Date:	7/26/18
		Due Date:	8/22/18
		Purchase Order Revision:	
		Revision Date:	
Ship To:	1270 Aberdeen Street Hawkesbury ON K6A 1K7 Canada Phone: 613-632-5200	Ship-To Contact:	Lavoie, Chantal Phone: clavoie@dartaero.com
		Via:	Ground
		Pymt Terms:	Net 30
		Freight Terms:	
		Special Comments:	

Revised

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1 DAS 61 9-89		M7075T6S6.000X0.250		7075-T6S Sheet 6" Thick Plate X 0.25" Wide : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/22/18	80 ft	84.29 ft	80 ft	\$14.35/ft	\$1,148.00
2 DAS 61 9-89		M7075T6S6.000X1.000		7075-T6S Sheet 6" Thick Plate X 1" Wide : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/22/18	60 ft	0 ft	60 ft	\$43.42/ft	\$2,605.20
3 DAS 61 9-89		M7075T6S1.500X1.500		7075-T6S Sheet 1.5" Thick Plate X 1.5" Wide : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/22/18	80 ft	0 ft	80 ft	\$20.50/ft	\$1,640.00
4		M7075T6S1.750X2.250		7075-T6 Sheet 1.750" X 2.250" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/22/18	43.75 ft	0 ft	44 ft	\$40.86/ft	\$1,787.63

Line Item Note: 20 pc - 48.25" long

5		M7075T6S1.250X2.750		M7075T6S1.250" X2.750" Cut From Plate : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM	Firmed	-	8/22/18	12 ft	0 ft	12 ft	\$31.20/ft	\$374.40
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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

PURCHASE ORDER PO040612

Tel (613) 632-5200

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
				B209 receive ft								
6		M7075T6S0.375X3.000		7075 T6 Sheet 0.375" X 3.000" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209	Firmed	-	8/22/18	60 ft	0 ft	60 ft	\$11.86/ft	\$711.60
7		M7075T6S0.750X4.000		7075 T6 Sheet 0.750" X 4.000" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209	Firmed	-	8/22/18	40 ft	0 ft	40 ft	\$28.58/ft	\$1,143.20
8		M7075T6S1.000X1.250		7075 T6 Sheet 1.000X1.250 : MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11 receive ft	Firmed	-	8/22/18	12 ft	0 ft	12 ft	\$17.15/ft	\$205.80
9		M7075T73B1.250X02.000		7075-T73 Bar 1.250" X 2.000" Cut In Billet 30" Long : MATERIAL: 7075-T73 OR 7075-T7351/T73510/T73511 BAR PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 OR AMS 4124 OR AMS-QQ-A-250/12 OR AMS 4078 receive ft	Firmed	-	8/22/18	25 ft	0 ft	25 ft	\$26.10/ft	\$652.50
Line Item Note		10 pcs cut at 30" long										
10		M7075T73R1.000		7075-T73 Round Bar 1.00 : MATERIAL: 7075-T73 OR 7075-T7351/T73510/T73511 ROUND BAR AS PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 receive ft	Firmed	-	8/13/18	12 ft	0 ft	12 ft	\$11.47/ft	\$137.64
											AUG 08 2018	
11	DAS 6 9-89	M303B1.500X4.000		303 Bar 1.500" X 4.000" : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE	Firmed	-	8/22/18	6 ft	0 ft	6 ft	\$238.50/ft	\$1,431.00
											AUG 13 2018	
12		M303B1.000X1.000		M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT	Firmed	-	8/13/18	12 ft	0 ft	12 ft	\$18.72/ft	\$224.64
											AUG 08 2018	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

**PURCHASE ORDER
PO040612**

Tel (613) 632-5200

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
				ACCEPTABLE receive ft								
13		M2024T3S.090		2024-T3 .090 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	-	8/22/18	144 sf	0 sf	144 sf	\$8.16/sf	\$1,175.04
14 DAS 61 9-89		M4130NR0.375		4130 Steel Round Bar .375" : MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft	Firmed	-	8/13/18	60 ft	0 ft	60 ft	\$2.37/ft	\$142.20
15 DAS 61 9-89		M2024T3S.063		2024-T3 .063 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	-	8/22/18	96 sf	0 sf	96 sf	\$6.51/sf	\$624.96
16 DAS 61 9-89		M2024T3S.080		2024-T3 .080 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	-	8/22/18	96 sf	0 sf	96 sf	\$6.86/sf	\$658.56
17 AR		M304R1.250		304 Round Bar 1.250 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/3/18	12 ft	0 ft	12 ft	\$10.42/ft	\$125.04
18 DAS 61 9-89		M304R1.500		304 Round Bar 1.500 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/3/18	12 ft	0 ft	12 ft	\$13.81/ft	\$165.72
19		M6061T6B2.000X08.000		6061-T6 Bar 2.00" X 8.00" (Cut In 4Ft Section) : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	8/14/18	8 ft	0 ft	8 ft	\$56.83/ft	\$454.64
Line Item Note	cut in section of 4 ft											
DAS 61 9-89		M303R1.250		303 Round Bar 1.250 : MATERIAL: AISI 303 SS	Firmed	-	8/3/18	12 ft	0 ft	12 ft	\$11.80/ft	\$141.60



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
PO040612

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
				ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft								

Grand Total: \$15,549.37

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents

- A048 counterfeit parts avoidance, detection, mitigation and disposition program

- A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/3/18 11:09 AM dart.baker.diane

[Signature]

SHIP TO:	A M CASTLE & CO 3050 SOUTH HYDRAULIC WICHITA, KS 67216
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SOLD TO:	AM CASTLE & CO - SOLD TO 1420 KENSINGTON RD SUITE 220 OAK BROOK, IL 60523
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KAISER
ALUMINUM

Trentwood Works

PO Box 15108, Spokane Valley WA 99215-5108
15000 E Euclid, Spokane Valley WA 99216
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4508307

CUSTOMER PO NUMBER:	WORK PACKAGE:	CUSTOMER PART NUMBER:	SHIP RUN/LOAD:	GOVT CONTRACT NUMBER:	
456581-1		750023	104263/7		
KAISER ORDER NO:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:	PRODUCT DESCRIPTION:
1253097-1	30-APR-2018	7075	BARE	T651	Sawed Plate
WEIGHT SHIPPED:	QUANTITY:	TRUCK B/L #:	GAUGE:	DIAMETER/WIDTH:	LENGTH:
3381 LB	19 PCS EST.	2073405	0.2500 IN (6.3500 MM)	48.500 IN (1231.9 MM)	144.500 IN (3670.3 MM)

MHU 2203694: LOT 241692B3: 19 pieces;

Certified Specifications

AMS 4045/RevL
CMMP 025/RevV

AMS-QQ-A-250/12/RevA

ASTM B 209/Rev14

Test Code: 1512

Lot: 241692B3

Cast 611

Drop 09

Test Results

Ingot 3

Melted in USA

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T651	LT / 2 (Min:Max)	85.8 : 86.4 (592 : 596)	75.4 : 76.4 (520 : 527)	11.8 : 12.6

(ASTM E1251)

Chemistry:	Si	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	TOT	0.04
Actual(wt%)	0.08	0.18	1.5	0.06	2.5	0.19	5.6	0.03	0.01	0.02			

ALLOY LIMITS

	Si	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075												
MIN(wt%)	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

ORDER COMMENTS

AMC CA-15409 R 3



KAISER **ALUMINUM**

Trentwood Works
PO Box 15108, Spokane Valley WA 99215-5108
15000 E Euclid, Spokane Valley WA 99216
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4508307

CERTIFICATION

Kaiser Aluminum, Trentwood Works, is ISO 9001, AS9100, and ISO 14001 certified, and hereby certifies that all material shipped under this order:

- has been inspected, tested, and found to be in conformance with the requirements of the specifications indicated herein.
- All test equipment and measuring devices are calibrated and certified in accordance applicable specifications. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. Reported elongation values have been measured as elongation at fracture.
- was melted in the United States of America or a qualifying country per DFARS 225.672-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content.
- has been thermally processed in compliance with AMS 2772, where applicable.
- is mercury free, within the limits of detection of ASTM E1215 (<1ppm).
- is in compliance with RoHS 2, European Union Directive 2011/65/EU.
- is in compliance with European Chemical Agency, ECHA, REACH regulations, (EC) No 1907/2006, and Kaiser regularly monitors these regulations for updates.
- is free of Conflict Minerals, as defined in Section 15.2 of the Dodd-Frank Act.
- is free of weld repair.
- meets the reporting requirements of EN10204, Type 3.1.

Any warranty is limited to that shown on Kaiser Aluminum's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of the Kaiser Aluminum laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

JAMES HEMENWAY, TECHNICAL PROCESS MANAGER



SPECIFICATION CONTROL DRAWING

A PURCHASE MATERIAL: M7075-T6/T62/T651 ALUMINUM SHEET OR PLATE
 SPECIFICATION: QQ-A-250/12 OR AMS-QQ-A-250/12
 OR AMS 4045
 OR ASTM B209

OR

B PURCHASE MATERIAL: M7075-T6/T62/T651 ALCLAD ALUMINUM SHEET OR PLATE
 SPECIFICATION: QQ-A-250/13 OR AMS-QQ-A-250/13
 OR AMS-4048 /4049
 OR ASTM B209

C PART NUMBER:

M7075T6S	TTT	X	WWW
	THK		WIDTH

WHERE "TTT" = THICKNESS (IN INCHES)
 AND "WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M7075T6S.063

EG. 3.5" WIDE BY 0.500" THICK PLATE = M7075T6S.500X3.500

D PREFERRED SIZE:
 .TTT BY 4FT BY 10FT FOR SHEET

RELEASED
 2017 JUN 19
 ECN 17-574
 ✓

B		ADD REF TO PLATE: "T651" TEMPER, AMS 4048, OPTIONAL WIDTH DIM (CARB-148)		CP	17.05.05
A		NEW ISSUE		RF	10.11.08
REV.		DESCRIPTION		BY	DATE
DESIGN		RF		DART AEROSPACE LTD	
DRAWN		CP		HAWKESBURY, ONTARIO, CANADA	
CHECKED		ML		DRAWING NO.	
MFG. APPR.		LL		M7075T6S	
APPROVED		WM		TITLE	
DE APPR.		DS-#		7075-T6 SHEET/PLATE SPEC	
DATE		17.05.05		SCALE	
				NIS	

1
 2
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 4
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 6
 7
 8

3
 2
 1

7

8

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M707576 56.000x0.250
 DATE: 18/08/15

PO / BATCH NO.: P0040612/S102371

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 84.29 ft
 QUANTITY INSPECTED: 84.29 ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.250"
 THICKNESS RECEIVED: 0.250"
 SHEET SIZE ORDERED: 6" x 0.250" 12.0 ft
 SHEET SIZE RECEIVED: 6" x 12.5 ft

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(<u>N</u>)	
CORRECT FINISH	(<u>Y</u>)	N	
CORROSION	Y	(<u>N</u>)	
CORRECT GRAIN DIRECTION	(<u>Y</u>)	N	
CORRECT MATERIAL PER M-DRAWING	(<u>Y</u>)	N	ASTM B209
CORRECT THICKNESS	(<u>Y</u>)	N	
PHOTO REQUIRED	Y	(<u>N</u>)	
CORRECT REF # TO LINK CERT	(<u>Y</u>)	N	UT: 241692B3
CORRECT MATERIAL IDENTIFICATION	(<u>Y</u>)	N	
CORRECT M# ON THE MATERIAL	(<u>Y</u>)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(<u>N</u>)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(<u>N</u>)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>A</u>	SIGNED OFF BY: _____
DATE: <u>18/08/15</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

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A M CASTLE CO
3050 SO HYDRAULIC
WICHITA KS
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A M CASTLE
1420 KENSINGTON ROAD, SUITE 220
OAK BROOK IL
60523
US

A M CASTLE		110642463	4075	INCLUSION	Serial:20180330-0110642463	Pg 1 of 6
CUSTOMER PURCHASE ORDER NO. & ITEM 453754				Constellium ORDER NO. 232826	CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA	
ALLOY 7075	CLAD	TEMPER T651	GAUGE 1.00000 in 25.40 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm	
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH						
CUSTOMER SPECIFICATION AMS 4045K						
PART NUMBER 752188		B/L NUMBER 97341		DATE SHIPPED 03/31/2018		
WT. SHIPPED 6420.000 LB		NO. OF PIECES 000009		GOVT. CONTRACT NO.		


Dave Dunbarger - Laboratory Manager

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

ASTM B594 REV 13 2013 100% SONIC W/ 0.12" DEADZONE Class A
AMS QQ-A-250/12A
AMS-STD-2154A 2012 TYPE1 CLASS A 100% SONIC MINUS DEADZONE
ASTM B209-14
BSS-7055B 2013 CLASS A 100% SONIC TESTED MINUS DEADZONE
CSTI006 REV E 2011 CLASS A 100% SONIC MINUS DEADZONE
DPS 4.713 REV AK 2012 CLASS A 100% SONIC MINUS DEADZONE
GAMPS 9101 REV B 2006 CLASS A 100% SONIC MINUS DEADZONE
PS 21211P 2010 CLASS A 100% SONIC MINUS DEADZONE

Load Details

Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot
1001741754	710.000	322.050	9413629	01		
1001741754	710.000	322.050	9413629	02		
1001741754	710.000	322.050	9413629	03		
1001741758	705.000	319.782	9413631	01		
1001741758	705.000	319.782	9413631	02		
1001747251	720.000	326.586	9413633	03		
1001747252	720.000	326.586	9413634	01		
1001747252	720.000	326.586	9413634	02		
1001747252	720.000	326.586	9413634	03		

Lot: 9413629 (See test results below)


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 WICHITA KS
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A M CASTLE
 1420 KENSINGTON ROAD, SUITE 220
 OAK BROOK IL
 60523
 US

A M CASTLE		110642463	4075	INCLUSION		Serial:20180330-0110642463	Pg 2 of 6
CUSTOMER PURCHASE ORDER NO. & ITEM 453754				Constellium ORDER NO. 232826		CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA	
ALLOY 7075	CLAD	TEMPER T651	GAUGE 1.00000 in 25.40 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm		
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH							
CUSTOMER SPECIFICATION AMS 4045K							
PART NUMBER 752188		B/L NUMBER 97341		DATE SHIPPED 03/31/2018		 Dave Dunbarger - Laboratory Manager	
WT. SHIPPED 6420.000 LB		NO. OF PIECES 000009		GOVT. CONTRACT NO.			

Tensile - Room Temperature (US)

Direction	Tests	Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
		Min	Max	Min	Max	Min	Max	
LT	02	83.7	84.3	74.6	75.0	13.0	14.0	

Tensile - Room Temperature (SI)

Direction	Tests	Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report
		Min	Max	Min	Max	Min	Max	
LT	02	577	581	514	517	13.0	14.0	

Chemistry (Actual)

	SI	FE	CU	MN	MG	CR	ZN	TI	ZR
Core	0.09	0.18	1.41	0.04	2.61	0.20	5.66	0.04	0.01

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

 Lot: **9413631** (See test results below)


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1420 KENSINGTON ROAD, SUITE 220
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A M CASTLE		110642463	4075	INCLUSION		Serial:20180330-0110642463	Pg 3 of 6																								
CUSTOMER PURCHASE ORDER NO. & ITEM 453754				Constellium ORDER NO. 232826		CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA																									
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PART NUMBER 752188		B/L NUMBER 97341		DATE SHIPPED 03/31/2018																											
WT. SHIPPED 6420.000 LB		NO. OF PIECES 000009		GOVT. CONTRACT NO.																											
Tensile - Room Temperature (US) <table border="1"> <thead> <tr> <th colspan="3">Ultimate (KSI)</th> <th colspan="2">Yield (KSI)</th> <th colspan="2">Elongation (%)</th> <th>Report</th> </tr> <tr> <th>Direction</th> <th>Tests</th> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>LT</td> <td>02</td> <td>82.6</td> <td>83.0</td> <td>73.3</td> <td>73.9</td> <td>12.5</td> <td>13.0</td> </tr> </tbody> </table>								Ultimate (KSI)			Yield (KSI)		Elongation (%)		Report	Direction	Tests	Min	Max	Min	Max	Min	Max	LT	02	82.6	83.0	73.3	73.9	12.5	13.0
Ultimate (KSI)			Yield (KSI)		Elongation (%)		Report																								
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OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER																															
All material contained in this lot was cast and manufactured in the USA																															
Lot: 9413633 (See test results below)																															
 1.729 KB																															
P-860-155D REVISED: 01 2018																															

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 OAK BROOK IL
 60523
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A M CASTLE				110642463	4075	INCLUSION	Serial:20180330-0110642463	Pg 4of6																							
CUSTOMER PURCHASE ORDER NO. & ITEM 453754						Constellium ORDER NO. 232826	CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Dave Dunbarger - Laboratory Manager																								
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PART NUMBER 752188			B/L NUMBER 97341	DATE SHIPPED 03/31/2018																											
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Core	0.05	0.11	1.41	0.05	2.57	0.20	5.55	0.04	0.00																						
OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER																															
All material contained in this lot was cast and manufactured in the USA																															
Lot: 9413634 (See test results below)																															
 P-860-155D REVISED: 01 2018																															



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A M CASTLE		110642463	4075	INCLUSION	Serial:20180330-0110642463	Pg 5 of 6	
CUSTOMER PURCHASE ORDER NO. & ITEM 453754				Constellium ORDER NO. 232826	CERTIFICATION		
ALLOY 7075	CLAD	TEMPER T651	GAUGE 1.00000 in 25.40 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm	"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA	
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH						 Dave Dunbarger - Laboratory Manager	
CUSTOMER SPECIFICATION AMS 4045K							
PART NUMBER 752188		B/L NUMBER 97341		DATE SHIPPED 03/31/2018			
WT. SHIPPED 6420.000 LB		NO. OF PIECES 000009		GOVT. CONTRACT NO.			

Tensile - Room Temperature (US)

Direction	Tests	Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
		Min	Max	Min	Max	Min	Max	
LT	02	82.4	83.1	72.7	73.8	13.0	14.0	

Tensile - Room Temperature (SI)

Direction	Tests	Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report
		Min	Max	Min	Max	Min	Max	
LT	02	568	573	501	509	13.0	14.0	

Chemistry (Actual)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Zr
Core	0.05	0.11	1.41	0.05	2.57	0.20	5.55	0.04	0.00

OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER

All material contained in this lot was cast and manufactured in the USA

QUALITY TEXTS:
AMC CA-15403 R 8



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A M CASTLE 110642463 4075 INCLUSION Serial:20180330-0110642463 Pg 6 of 6							
CUSTOMER PURCHASE ORDER NO. & ITEM 453754				Constellium ORDER NO. 232826		CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA	
ALLOY 7075	CLAD	TEMPER T651	GAUGE 1.00000 in 25.40 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm		
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH							
CUSTOMER SPECIFICATION AMS 404K							
PART NUMBER 752188		B/L NUMBER 97341		DATE SHIPPED 03/31/2018			
WT. SHIPPED 6420.000 LB		NO. OF PIECES 000009		GOVT. CONTRACT NO.			
 Dave Dunbarger - Laboratory Manager							
THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.							
CHEMISTRY BY OES: ARKSPARK CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399 WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557 DUNS Number: 090570149; CAGE Code: 1YWL9							
 Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product. "END OF CERTIFICATION"							
P-860-155D REVISED: 01 2018							

SPECIFICATION CONTROL DRAWING

A PURCHASE MATERIAL: 7075-T6/T62/T651 ALUMINUM SHEET OR PLATE
 SPECIFICATION: QQ-A-250/13 OR AMS-QQ-A-250/12
 OR AMS 4048 / 4049
 OR ASTM B209

OR

B PURCHASE MATERIAL: 7075-T6/T62/T651 ALCLAD ALUMINUM SHEET OR PLATE
 SPECIFICATION: QQ-A-250/13 OR AMS-QQ-A-250/13
 OR AMS 4048 / 4049
 OR ASTM B209

OR

C PURCHASE MATERIAL: M7075T6S |TTT| X |W WWW|
 PART NUMBER: M7075T6S |TTT| X |W WWW|
 WHERE "TTT" = THICKNESS (IN INCHES)
 AND "WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

WHERE "TTT" = THICKNESS (IN INCHES)

AND "WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M7075T6S 063

EG. 3.5" WIDE BY 0.500" THICK PLATE = M7075T6S 500X3.500

D PREFERRED SIZE:
 .TTT BY 4FT BY 10FT FOR SHEET

RELEASED
 2017 JUN 19 ✓
 ECN 17-574

APPROVED

B	ADD REF TO PLATE: "T651" TEMPER, AMS 4048, OPTIONAL WIDTH DIM (CARB-149)		CP	17.05.05
A	NEW ISSUE		RF	10.11.08
REV	DESCRIPTION		BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	CP	DRAWING NO.		
CHECKED	ML	REV. B		
MFG/APPR.	LL	SHEET 1 OF 1		
APPROVED	WM	TITLE	SCALE	NTS
DE APPR.	D9-1	7075-T6 SHEET/PLATE SPEC		
DATE	17.05.05			

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M70757656.200x1-000
 DATE: 18/08/15

PO / BATCH NO.: P0010612/S102372

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 60.2
 QUANTITY INSPECTED: 60.2
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1"
 THICKNESS RECEIVED: 1"
 SHEET SIZE ORDERED: 60.2
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>N</u>	
CORRECT FINISH	<u>Y</u> N	
CORROSION	Y <u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u> N	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u> N	<u>AMS 4045</u>
CORRECT THICKNESS	<u>Y</u> N	
PHOTO REQUIRED	<u>Y</u> <u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u> N	<u>UT: 9413631</u>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u> N	
CORRECT M# ON THE MATERIAL	<u>Y</u> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/08/15</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

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US

A M CASTLE		110628834	4075	INCLUSION	Serial:20180222-0110628834	Pg 1of3		
CUSTOMER PURCHASE ORDER NO. & ITEM 450879				Constellium ORDER NO. 230353	CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA			
ALLOY 7075	CLAD	TEMPER T651	GAUGE 1.50000 in 38.10 mm	WIDTH 48.50000 in 1,232 mm			LENGTH 144.50000 in 3,670 mm	
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH								
CUSTOMER SPECIFICATION AMS QQ-A-250/12A								
PART NUMBER 750412		B/L NUMBER 95243	DATE SHIPPED 02/22/2018					
WT. SHIPPED 8440.000 LB	NO. OF PIECES 000008	GOVT. CONTRACT NO.						
						Dave Dunbarger - Laboratory Manager		
ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS: ASTM B594 REV 13 2013 100% SONIC W/ 0.125" DEADZONE Class A AMS 4045K AMS-STD-2154A 2012 TYPE1 CLASS A 100% SONIC MINUS DEADZONE ASTM B209-14 BSS-7055B 2013 CLASS A 100% SONIC TESTED MINUS DEADZONE CSTI006 REV E 2011 CLASS A 100% SONIC MINUS DEADZONE DPS 4.713 REV AK 2012 CLASS A 100% SONIC MINUS DEADZONE GAMPS 9101 REV B 2006 CLASS A 100% SONIC MINUS DEADZONE PS 21211P 2010 CLASS A 100% SONIC MINUS DEADZONE								
Load Details								
Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot		
1001715431	1,055.000	478.540	9410098	01				
1001715431	1,055.000	478.540	9410098	02				
1001715431	1,055.000	478.540	9410098	03				
1001715431	1,055.000	478.540	9410098	04				
1001715432	1,055.000	478.540	9410097	01				
1001715432	1,055.000	478.540	9410097	02				
1001715432	1,055.000	478.540	9410097	03				
1001715432	1,055.000	478.540	9410097	04				
Lot: 9410098 (See test results below)								
Tensile - Room Temperature (US)								
Direction	Tests	Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
		Min	Max	Min	Max	Min	Max	
LT	02	80.4	80.9	69.9	71.4	12.5	13.0	



P-860-155D REVISED: 01 2018

SHIP TO

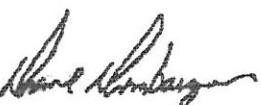
 A M CASTLE CO
 3050 SO HYDRAULIC
 WICHITA KS
 67216
 US

SOLD TO

 A M CASTLE
 1420 KENSINGTON ROAD, SUITE 220
 OAK BROOK IL
 60523
 US

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QUALITY TEXTS: AMC CA-15403A R 7																														
<small>THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL. WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.</small>																														
<small>CHEMISTRY BY OES: ARKSPARK</small> <small>CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT</small> <small>WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399</small> <small>WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557</small> <small>DUNS Number: 090570149; CAGE Code: 1YWL9</small>																														
<small>Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product.</small> <small>"END OF CERTIFICATION"</small>																														
<small>P-860-155D REVISED: 01 2018</small>																														

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: M7075-T6/T62/T651 ALUMINUM SHEET OR PLATE
SPECIFICATION: QQ-A-250/12 OR AMS-QQA-250/12
 OR AMS 4045
 OR ASTM B209

OR

△ PURCHASE MATERIAL: 7075-T6/T62/T651 ALCLAD ALUMINUM SHEET OR PLATE
SPECIFICATION: QQ-A-250/13 OR AMS-QQA-A-250/13
 OR AMS 4048 / 4049
 OR ASTM B209

△ PART NUMBER:

M7075T6S|TTT|X|W|WWW|
 THK|WIDTH|

WHERE "TTT" = THICKNESS (IN INCHES)

AND "WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M7075T6S.063

EG. 3.5" WIDE BY 0.50" THICK PLATE = M7075T6S.500X3.500

△ PREFERRED SIZE: .TTT BY 4FT BY 10FT FOR SHEET

△

APPROVED

2017 JUN 19 ✓/
 ECN 17-579

RELEASED

2017 JUN 19 ✓/
 ECN 17-579

B	ADD REF TO PLATE: "T651" TEMPER, AMS 4048, OPTIONAL WIDTH DIM (CAR16-149)	CP	17/05/05
A	NEW ISSUE	RF	10/11/08
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD	
DRAWN	CP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ML	DRAWING NO.	REV B
MFG/APPR.	LL	M7075T6S	SHEET 1 OF 1
APPROVED	WM	TITLE	SCALE
DE APR.	DS-#	7075-T6 SHEET/PLATE SPEC	NTS
DATE	17.05.05	© 2017 BY DART AEROSPACE LTD THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR DART AEROSPACE LTD. PURPOSES ONLY. NO COPIES ARE TO BE MADE WITHOUT THE WRITTEN CONSENT OF DART AEROSPACE LTD.	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M7075T6SL 500x1.500
 DATE: 18/08/15

PO / BATCH NO.: P0040612/S102373

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 84.29 ft
 QUANTITY INSPECTED: 84.29 ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500"
 THICKNESS RECEIVED: 1.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
	Y	N	
SURFACE DAMAGE	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/>	<input type="radio"/>	
CORROSION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/>	<input type="radio"/>	<u>AMS QQ-A-250/12</u>
CORRECT THICKNESS	<input checked="" type="radio"/>	<input type="radio"/>	
PHOTO REQUIRED	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/>	<input type="radio"/>	<u>4459410097</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/>	<input type="radio"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/>	<input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input type="radio"/>	<input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input type="radio"/>	<input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AJ</u>	SIGNED OFF BY: _____
DATE: <u>18/08/15</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in